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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,940	06/23/2000	Frank Ronneburg	13237-2720/MS#150533.1	9432

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EXAMINER

JACOBS, LASHONDA T

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,940

Applicant(s)

RONNEBURG ET AL.

Examiner

LaShonda T. Jacobs

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Leighton et al (hereinafter, "Leighton", 6,108,703).

As per claim 1, Leighton discloses a system for removing a defective server from a server pool comprising:

- a first server associated with a first buddy server and a second buddy server, the first server being operative to transmit a first ping signal to the first buddy server and to transmit a second ping signal to the second buddy server and to receive a first responsive signal from the first buddy server and to receive a second responsive signal from the second buddy server (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11);
- a server database operative to maintain the association between the first server and the first buddy server and to maintain the association between the first server and the second buddy server (col. 3, lines 25-36, and col. 16, lines 11-23);
- wherein the first server is further operative to send a first server down signal to the server database, in response to a determination that the first buddy server is down; (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11); and

- wherein the server database is further operative to associate the first server with a third buddy server in response to the receipt of the first server down signal (col. 3, lines 25-36, and col. 16, lines 11-23).

As per claim 2, Leighton discloses:

- wherein the first server is further operative to send a second server down signal to the server database, in response to a determination that the second buddy server is down and wherein the server database is further operative to associate the first server with a fourth buddy server in response to the receipt of the second server down signal (col. 3, lines 25-36, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 3, Leighton discloses:

- wherein the first ping signal comprises an ICMP ping signal and wherein the second ping signal comprises an ICMP ping signal (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 4, Leighton discloses:

- wherein the server database comprises a SQL database maintained on a SQL server (col. 3, lines 25-36, and col. 16, lines 11-23).

As per claim 5, Leighton discloses:

- wherein the server database maintains a list of active servers comprising the first server, the first buddy server and the second buddy server, and wherein, in response to the first server down signal, the server database is further operative to remove the first buddy server from the list of active servers (col. 5, lines 41-67, col. 6, lines 1-3, and col. 9, lines 31-47).

As per claim 6, Leighton further discloses:

- a client connected to the server database and wherein the list of active servers is used to connect the client to one of the servers in the list of active servers (col. 4, lines 57-67, col. 5, lines 3-22, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 7, Leighton discloses computer-implemented method for creating a virtual server ring, comprising the step of:

- storing an entry in a server table identifying a plurality of servers in a server pool, wherein each entry comprises a server identification, a first server buddy and a second server buddy (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 8, Leighton further discloses the steps of:

- adding a new server to the virtual server ring by randomly choosing one of the plurality of servers and the randomly chosen server's first server buddy (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11);
- reassigning the new server as the randomly chosen server's first server buddy (col. 10, lines 34-41, and col. 12, lines 35-55); and
- reassigning the new server as either the first server buddy or second server buddy of the randomly chosen server's first server buddy (col. 10, lines 34-41, and col. 12, lines 35-55).

As per claim 9, Leighton further discloses the step of:

- causing at least one of the plurality of servers to monitor its first buddy server and its second server buddy to determine whether one of its buddies is down (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim **10**, Leighton further discloses the step of:

- when the monitoring server determines that one of its buddies is down, reporting the identity of the down server to the server table (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim **11**, Leighton further discloses the steps of:

- causing a routing server, wherein the routing server is responsible for routing a client to the virtual server ring, to no longer route the client to the down server (col. 10, lines 19-40).

As per claim **12**, Leighton discloses:

- wherein the step of causing the routing server to no longer route the client to the down server comprises the step of removing the down server from the server table (col. 3, lines 58-65, col. 10, lines 19-40, and col. 13, lines 1-11).

As per claim **13**, Leighton further discloses:

- storing a buddy list at each of the plurality of servers, wherein the buddy list comprises the server's first server buddy and the server's second server buddy (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim **14**, Leighton discloses:

- wherein the step of causing at least one of the plurality of servers to monitor its first server buddy and its second server buddy to determine whether one of its buddies is

down comprises sending an ICMP ping signal to the first server buddy and to the second server buddy (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 15, Leighton further discloses the steps of:

- if one of the plurality of servers in the server pool shuts down normally, then causing the normally shutdown server to report its identity to the server table and removing the normally shutdown server from the server table (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 16, Leighton further discloses:

- reassigning the normally shutdown server's first server buddy and second server buddy to be buddies to one another (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 17, Leighton discloses a computer-implemented method for monitoring:

- assigning each of the plurality of servers a first server buddy and a second server buddy within the server pool (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11);
- causing each of the plurality of servers to monitor the status of its first server buddy and its second server buddy (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11); and
- if one of the plurality of servers determines that one of its buddies is down, then causing the monitoring server to notify a central repository that one of its buddies is down (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 18, Leighton further discloses the steps of:

Art Unit: 2157

- removing the down buddy server from the central repository when notification is received that the buddy server is down (col. 3, lines 58-65, col. 10, lines 34-41, and col. 13, lines 1-11).

As per claim 19, Leighton further discloses the step of:

- reassigning the down server's other buddy to be buddies with the monitoring server (col. 10, lines 34-41, and col. 12, lines 35-55).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,553,413 to Leighton et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 703-305-7494.

The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


Application/Control Number: 09/602,940

Page 8

Art Unit: 2157

LaShonda T. Jacobs
Examiner
Art Unit 2157

ltj
June 29, 2003


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SUPERVISORY PATENT EXAMINER
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